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cont.

47. The method of claim 45, wherein said protein is prothrombin, Factor VII, Factor IX, Protein C, Protein S, Factor V, Factor VIII, α 1-antitrypsin, antithrombin III, fibrinogen, albumin, an immunoglobulin, a hormone, a growth factor, erythropoietin, a bone morphogenetic protein, an enzyme, and enzyme inhibitor or an ion channel protein.

48. The method of claim 47, wherein said hormone is a growth hormone.

49. The method of claim 47, wherein said growth factor is a transforming growth factor.

50. The method of claim 47, wherein said enzyme is a protease, a glycosyltransferase, a phosphorylase, a kinase, or a γ -carboxylase.

51. The method of claim 47, wherein said enzyme is obtained from exthermophilic or thermophilic organisms.

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cont.

52. The method of claim 45, wherein said 5' expression regulatory sequences are obtained from a uromodulin gene, a renin gene, a erythropoietin gene, a uropontin gene, a nephrocalcin gene or a aquaporin gene.

53. The method of claim 45, wherein said kidney-specific promoter is a uromodulin promoter.

54. The method of claim 45, wherein said transgenic animal is a mammal.

55. The method of claim 45, wherein said transgenic animal is a pig, sheep, goat, cow, rodent, rabbit, horse, dog, cat, bird or reptile.

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cont.

56. A non-human transgenic animal that produces in its urine a protein, wherein said transgenic animal has stably integrated into its genome an exogenous gene construct comprising 5' expression regulatory sequences, including a kidney-specific promoter operably linked to an exogenous gene encoding said protein that is detectable in the urine of said transgenic animal.

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57. The animal of claim 56, wherein said protein is prothrombin, Factor VII, Factor IX, Protein C, Protein S, Factor V, Factor VIII, α 1-antitrypsin, antithrombin III, fibrinogen, albumin, an immunoglobulin, a hormones, a growth factor, erythropoietin, a bone morphogenetic protein, an enzyme, and enzyme inhibitor or an ion channel protein.

58. The animal of claim 57, wherein said hormone is a growth hormone.

59. The animal of claim 57, wherein said growth factor is a transforming growth factor.

60. The animal of claim 57, wherein said enzyme is a protease, a glycosyltransferase, a phosphorylase, a kinase, or a γ -carboxylase.

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61. The animal of claim 57, wherein said enzyme is obtained from exthermophilic or thermophilic organisms.

62. The animal of claim 56, wherein said 5' expression regulatory sequences are obtained from a uromodulin gene, a renin gene, a erythropoietin gene, a uropontin gene, a nephrocalcin gene or a aquaporin gene.

63. The animal of claim 56, wherein said kidney-specific promoter is a uromodulin promoter.

64. The method of claim 56, wherein said transgenic animal is a mammal.

65. The animal of claim 56, wherein said transgenic animal is a pig, sheep, goat, cow, rodent, rabbit, horse, dog, cat, bird or reptile.

66. Urine containing a recombinant protein produced by the animal of claim 56.—

Please cancel claims 2-4, 9, 10, and 14, without prejudice or disclaimer.